DESIGNATION OF HOLOTYPES AND LECTOTYPES FOR SPECIES DESCRIBED BY THOMAS L. CASEY IN THE SUBTRIBE PTEROSTICHI (COLEOPTERA:CARABIDAE:PTEROSTICHINI)¹

ROBERT T. ALLEN

Entomology Department, University of Arkansas, Fayetteville, AR 72701

ABSTRACT

Holotype and Lectotype designations are made for 26 species of Carabidae described by Thomas L. Casey in the tribe Pterostichini and in the following genera: *Gastrosticta*, *Lophoglossus*, *Loxandrus*, *Pterostichus*, *Poecilus*. The male genitalia of species for which figures have not been previously published are presented.

Professor Carl Lindroth (1975) adequately discussed the history and present status of the beetle collection of Thomas L. Casey, one of the most prolific writers among early North American amateur coleopterists. Over the years Lindroth designated holotypes and lectotypes (most of which were officially designated in 1975) for about 3/4 of the 1376 species names created by Casey in the Carabidae. Recently, several other workers also have designated type material among the Carabidae in the Casey collection.

This paper serves to complete designation of holotypes and lectotypes for species presently placed in the subtribe Pterostichi. The arrangement of the information follows that used by Lindroth (1975) except that categories (g) and (h) are added and species are listed in alphabetical order. Category (g) designates a specimen number label that has been added to each specimen. The specimen number is used to facilitate data storage and retrieval of information. Category (h) lists the figure number of the male genitalia illustrated in this paper. The following is quoted from Lindroth's paper (1975).

"Arrangement of Information

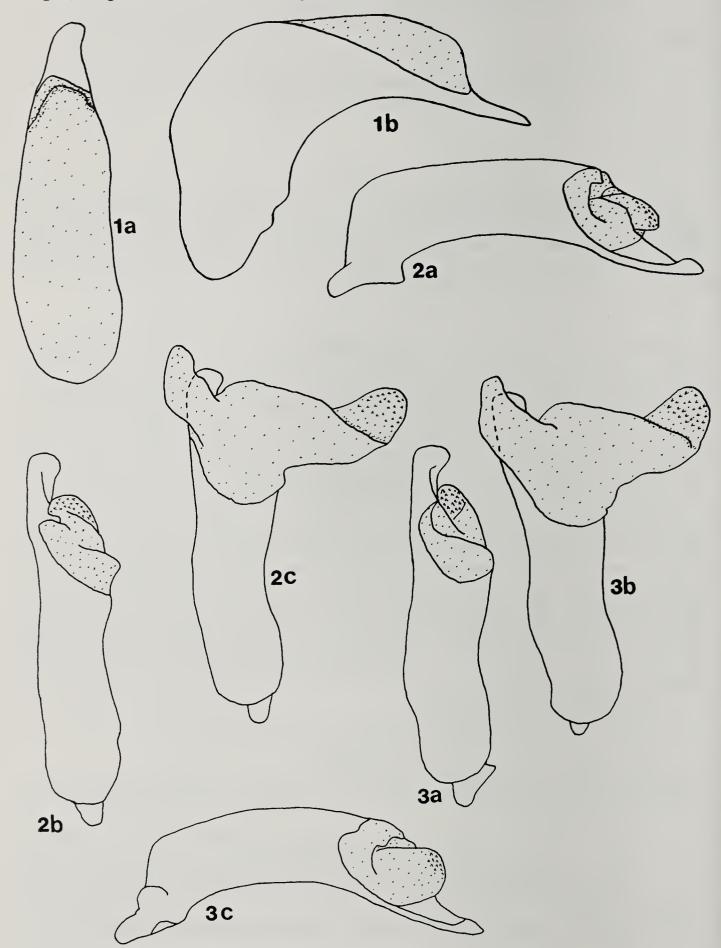
The original genus names used by Casey were followed _

Then, under each taxon, the following information is given:

- (a) reference to the original description;
- (b) number of specimens labeled as "Type" or "Paratype" (by L. L. Buchanan);
- (c) locality label of the "Type", often in abbreviated form, as used by Casey. (The symbol "L", = Levette collection, was often doubtfully translated in the description as meaning Colorado or Indiana);
- (d) possible disagreement between "Type" and Casey's original description;

¹Published with the approval of the Director of the Arkansas Agricultural Experiment Station.

- (e) decision whether a Holotype or a Lectotype should be designated;
- (f) valid name according to present opinion (as a rule with reference to a paper, where Casey's name was synonymized).
- [(g) UAIC computer reference number].
- [(h) Figure number of male genitalia].



Figs. 1-3, male aedeagus: 1, Gastrosticta amnicola (1A Dorsal; 1B Left lateral); 2, Lophoglossus bispiculatus (2A Left Lateral; 2D Dorsal; 2C Dorsal, sac everted); 3, L. illini (3A Dorsal; 3B Dorsal, sac everted; 3C left lateral).

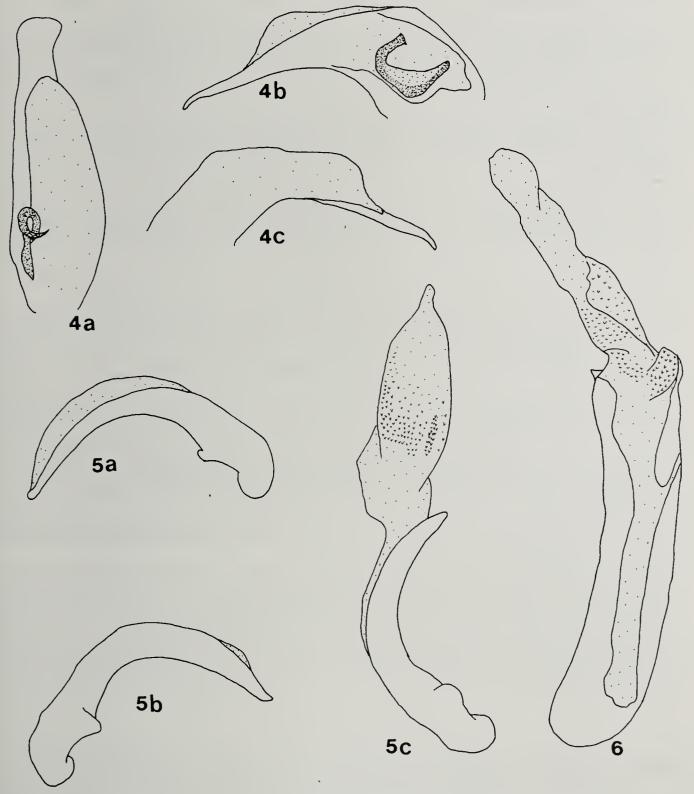
"As *Holotype* a specimen is available only under the condition that Casey himself expressly stated the original to have been based on a single individual. Under all other circumstances, even if the species is represented by a single specimen in Casey's collection, a *Lectotype* must be selected.

"The 4 kinds of "types" have been abbreviated as a single boldface letter, as follows: T = "Type"; P = "Paratype"; according to L. L. Bu-

chanan's labeling (and almost without exception conspecific).

"H = Holotype: L = Lectotype; according to my own [Robert T. Allen] decision. Paralectotypes have not been marked."

I thank the Board of Trustees of the University of Arkansas for granting me a 6 months off-campus duty assignment during which time this work was conducted. I also thank Dr. T. L. Erwin of the U.S. National Museum of Natural History for providing space for me to work during this time.



Figs. 4-6, male aedeagus: 4, *Pterostichus puta* (4A Dorsal; 4B right lateral; 4C left lateral); 5, *P. snowi* (5A right lateral; 5B left lateral; 5C left lateral, sac everted); 6, *Peocilus louisinus*, dorsal, sac everted.

THE SPECIES

 $Gastrosticta\ subacuta\ (1918:373).$ Female T. Texas. T = L. UAIC 44069.

G. amnicola (1918:372). Male T. 1 P. Missouri (Casey lists St. Louis in the original description). T = L. UAIC 44070. Fig. 1.

- Lophoglossus bispiculatus (1913:146). Male T. No locality label (Casey lists Indiana as the type locality in the original description). T = L. UAIC 44075. Fig. 2.
- $L.\ illini$ (1913:145). Male T. 1 male 1 female P. Illinois. T = L. UAIC 44076. Fig. 3.
- Loxandrus accelerans (1918:385). Female T. 1 P. Texas (Casey lists Galveston in the original description). T = L. UAIC 44047.
- L. breviusculus (1924:80). Female T. Dunedin, Florida, W.S.B. Coll., 12-4-17. T = H. UAIC 44048.
- L. cervicalis (1918:385). Male T. Sarasota, Florida, W.S.B. Coll., 1-31-1911. T = L (Allen, 1972, wrongly listed this specimen as the Holotype; figures 130A,B,C,D). UAIC 44065.
- L. cincinnati (1924:80). Male T. 1 P. Cincinnati, Ohio, VII-? T = L. (Allen, 1972, wrongly listed the T specimen as a Holotype; figure 116). UAIC 44068.
- L. collucens (1918:382). Female T. Texas (Casey lists Houston in the original description). T = L. UAIC 44049.
- L. comptus (1918:387). Female T. Dunedin, Florida, W.S.B. Coll., 4-5-1915. T = L. UAIC 44050.
- L. contumax (1918:388). Female T. Florida. T = L. UAIC 44051.
- $L.\ cursitans$ (1918:387). Female T. Dunedin, Florida, W.S.B. Coll., 3-5-17. T = L. UAIC 44052.
- L. concinnus (1918:391). Female T. 1 P. Dunedin, Florida, W.S.B. Coll., 2-26-17. T = L. UAIC 44053.
- L. fulgens (1918:388). Female T. Vicksburg, Mississippi. T = L. UAIC 44055.
- L. lateralis (1918:381). Female T. Sarasota, Florida, W.S.B. Coll., 3-4-1911. T = L. UAIC 44056.
- L. limatus (1918:383). Female T. Washington, D.C., 15-10. T = L. UAIC 44057.
- L. ludovicianus (1918:383). Female T. Cane River, Louisiana. T = L. UAIC 44058.
- L. mandibularis (1918:382). Male T. D.C. T = L. L. rectus (Say) (Allen, 1972; figures 98A,B,C). UAIC 44063.
- L. mundus (1918:385). Female T. LaBelle, Florida, W.S.B. Coll., 2-27-14. T = L. UAIC 44059.
- L. parvicollis (1918:389). Female T. Texas (Casey lists Galveston in the original description). T = H. UAIC 44060.
- L. scitus (1918:388). Male T. 1 P. Dunedin, Florida, W.S.B. Coll., 2-1-1913. T = L. L. floridanus LeConte (Allen, 1972; figures 122A,B). UAIC 44066.
- L. suturalis (1918:384). Female T. Dunedin, Florida, W.S.B. Coll., 2-20-18. T = L. UAIC 44061.
- L. vulneratus (1918:390). Female T. No locality label (Casey lists Indiana in the original description). T = L. UAIC 44062.
- Pterostichus puta (1913:135). Female T. 1 P. Texas. P = L. (I have selected the paratype specimen because it is a male). UAIC 44073. Fig. 4.
- P. snowi (1913:137). Male T. 1 male, 1 female P. Arizona, San Bernadino Ranch, Cochise Co. 3750 ft., Aug., F. H. Snow. T = L. UAIC 44079. Fig. 5.
- Poecilus lucublandus ssp. louisinus (1924:76). Male T. St. Louis, Missouri. T = H. UAIC 44078. Fig. 6.

REFERENCES CITED

ALLEN, ROBERT T. 1972. A revision of the genus Loxandrus LeConte (Coleoptera:Carabidae) in North America. Ent. Amer. 46:1-184.

LINDROTH, CARL. 1975. Designation of Holotypes and Lectotypes among ground beetles (Coleoptera:Carabidae) described by Thomas L. Casey. Coleop. Bull. 29:109-147.